WHAT IS CLAIMED IS:

1. A method for fabricating an image sensor, the method comprising:

forming an over coat layer on an upper face of a semiconductor substrate on which a color filter layer is formed;

forming a microlens on the over coat layer;

covering the microlens with a protection layer;

back grinding a lower face of the semiconductor substrate; and

removing the protection layer of the microlens.

- 2. The method for fabricating the image sensor as claimed in claim 1, wherein the protection layer of the microlens is formed of Spin On Glass (SOG).
- 3. The method for fabricating the image sensor as claimed in claim 2, wherein the method further comprises curing the protection layer.
- 4. The method for fabricating the image sensor as claimed in claim 3, wherein a curing temperature of the curing is in a range of 150 to 300°C.

- 5. The method for fabricating the image sensor as claimed in claim 3, wherein a curing time of the curing is around 30 minutes.
- 6. The method for fabricating the image sensor as claimed in claim 1, wherein the removing comprises applying one of buffered HF (BHF) and dilute HF (DHF) onto the protection layer.